

by *Kishore Visvanathan, MD*

The Saskatoon Clamp™:

a new anti-incontinence device



The problem of male urinary incontinence has received much less attention than its female counterpart. Although numerous procedures have been developed to cure incontinence in females, males to a large extent have had to make do with stopgap measures. This may be due in part to the lower incidence of stress-induced incontinence in males. However, several factors, including an aging population and the increased popularity of radical prostatectomy to treat prostate cancer, have resulted in an increased incidence of male urinary incontinence. For this reason, our group decided to revisit this clinical problem and develop a new device for its correction.

Grasping the issue

At present, management options for male urinary incontinence include use of external urine-collection devices (condom catheters), insertion of an artificial urinary sphincter, periurethral injection of collagen or use of a urethral compression device (urethral clamp). Because the first option seems technically fully developed, and the artificial sphincter and collagen injections involve invasive procedures, our group focused on the last option, urethral clamps.

The ideal clamp must satisfy 3 criteria: ease of application, reliability and affordability. Our device, the Saskatoon Clamp™, satisfies all of these criteria.

Ease of application is the most striking feature of the Saskatoon Clamp™. Current devices require men to use both hands to manipulate the urethral clamp onto the penis. It can be difficult to stabilize the penis for accurate placement. The Saskatoon Clamp™ features an automatic applicator, thus freeing the man's hands to allow consistent placement on the penile urethra (Fig. 1). This is particularly useful because many patients with male

urinary incontinence are elderly and may have impaired vision or lack fine motor coordination.

Reliability of the Saskatoon Clamp™ is excellent. It applies a urethral closure pressure of about 450 cm H₂O, virtually guaranteeing freedom from urine leakage. In addition, its unique design makes accidental dislodgement — a common problem with current devices — unlikely.

Finally, the Saskatoon Clamp™ is modestly priced (Table 1) and should be within financial reach of most men suffering with male urinary incontinence.

In a Phase I clinical trial our group tested the Saskatoon Clamp™ on 13 men with male urinary incontinence. A double-blind design was used (i.e., the test subjects were blindfolded and the investigators closed their eyes just before application of the device). After the device was applied, none of the 13 men complained further of male urinary incontinence.

The Saskatoon Clamp™ promises to make a significant impact in the management of the vexing problem of male urinary incontinence.

The support of Oscar Mayer Ltd. is gratefully acknowledged.

**Dr. Visvanathan is Clinical Associate Professor
in the Department of Surgery,
University of Saskatchewan, Saskatoon.**

**Table 1: Price of Saskatoon Clamp™
through various suppliers**

Supplier	Cost, \$
Home Hardware	1.59
Zellers	1.67
Canadian Tire	1.89



Fig. 1: The Saskatoon Clamp™, a new “hands-free” device for managing male urinary incontinence, features an automatic applicator that allows consistent placement on the penile urethra and guarantees freedom from urine leakage. Its unique design prevents accidental dislodgement.